

IN THE CLAIMS

Please amend the claims as follows:

1. (Presently Amended) An integrated circuit that comprises
 - a plurality of power supply pads;
 - a power supply conductor;
 - a plurality of power supply connections, each of the plurality of power supply connections coupled between the power supply conductor and a respective one of the power supply pads at a respective location along the power supply conductor;
 - ~~current test~~voltage drop measuring circuitry for performing detections, ~~each~~ of a voltage drop between a first and second point along a respective one of the power supply connections;
 - switchable test current drawing circuits coupled in parallel at respective further locations along the power supply conductor;
 - a test circuit, arranged to cause the ~~current test~~voltage drop measuring circuitry to perform said detections successively, ~~each~~ while activating at least a respective one of the current drawing circuits, ~~keeping inactive at least a further respective one of the current drawing circuits that is connected to the power supply conductor further from the respective one of the power supply connections on which that detection is performed than the activated respective one of the current drawing circuits.~~

2. (Presently Amended) ~~The~~An integrated circuit according to Claim 1, wherein the test circuit is arranged to activate during each detection a respective pair of the current drawing circuits in addition to said respective one of the current drawing circuits, so that the current drawing circuits of the respective pair are connected to ~~the~~a power supply connection between the respective one of current drawing circuits and any power supply connections other than power supply connection on which that detection is performed.

3. (Presently Amended) ~~The~~An integrated circuit according to Claim 1, wherein during ~~a~~each detection the respective current drawing circuit that is activated during that detection is connected along~~to~~ the power supply conductor nearer to ~~the respective one of~~ the power supply connections on which that detection is performed than to any other one of the power supply connections.

4. (Presently Amended) ~~An~~The integrated circuit according to Claim 1, the test circuit comprising a functional chain of signal lines, each signal line specific to a respective one of the detections, ~~each~~ for carrying a signal responsive to completion of activation of the at least one current drawing circuit that is activated during the respective one of the detections, at least when that detection has indicated no failure, the test circuit

controlling activation of the at least one of the current drawing circuits for successive detections with signals from successive ones of the signal lines from the chain.

5. (Presently Amended) ~~An~~The integrated circuit according to Claim 1, comprising an overall reset input for resetting functional circuits of the integrated circuit, the test circuit being arranged to start alternately activating the different signal lines from a start of ~~the~~a chain in response to ~~the~~a reset signal.

6. (Presently Amended) ~~An~~The integrated circuit according to Claim 1, wherein ~~the~~a signal on ~~said~~a signal line is a signal indicative of failure or no-failure result of the test of the corresponding power supply connection under detection, the test circuit being arranged to indicate a failure on said signal line at least until the test during activation of the corresponding power supply connection is executed, the at least one current drawing circuit being activated only if a no-failure result is indicated for the test involving activation of a preceding at least one current drawing circuits.

7. (Presently Amended) A method of testing an integrated circuit, wherein the integrated circuit has a plurality of power supply pads, a power supply conductor and a plurality of power supply

connections, each of the plurality of power supply connections coupled between the power supply conductor and a respective one of the power supply pads at a respective location along the power supply conductor, the method comprising

- performing a plurality of detections ~~successively, each of a~~ voltage drop between a first and second point along a respective one of the power supply connections;
- switching on at least one test current drawing circuits during each detection, wherein the at least one test current drawing circuit that is switched on during a first one of the detections ~~being~~ is switched off during a second one of the detections, when the at least one current drawing circuit that is switched on during the first one of the detections is connected ~~to~~ along the power supply conductor further from ~~the respective one of the~~ power supply connections on which the second one of the detection is performed than the at least one of the current drawing circuits that is switched on during the further one of the detections.

8. (Presently Amended) ~~A~~ The method according to Claim ~~76~~, comprising activating during each detection a respective pair of the current drawing circuits in addition to said respective one of the current drawing circuits, so that the current drawing circuits of the respective pair are connected to ~~the~~ a power supply connection between the respective one of current drawing circuits

and any power supply connections other than power supply connection on which that detection is performed.

9. (Presently Amended) A-The method according to Claim 8, wherein during each detection the respective current drawing circuit that is activated during that detection is connected ~~to~~ along the power supply conductor nearer to the ~~respective one of the~~ power supply connections on which that detection is performed than to any other one of the power supply connections.

10. (Presently Amended) A-The method according to Claim 76, ~~the a~~ test circuit comprising a functional chain of signal lines, each signal line specific to a respective one of the detections, ~~each~~ ~~for~~ carrying a signal responsive to completion of activation of the current drawing circuit that is activated during the respective one of the detections, at least when that detection has indicated no failure, the method comprising activation of the respective ones of the current drawing circuits for successive detections with signals from successive ones of the signal lines from the chain.

11. (Presently Amended) A-The method according to Claim 67, wherein ~~the a~~ signal on ~~said a~~ signal line is a signal indicative of failure or no-failure result of ~~the a~~ test during activation of the corresponding power supply connection under detection, ~~the a~~

test circuit being arranged to indicate a failure on said signal line at least until the test during activation of the corresponding power supply connection is executed, the current drawing circuits being activated only if a no-failure result is indicated after detection during activation of preceding current drawing circuits.